AIR POWER AND COUNTERINSURGENCY: A STRATEGIC STUDY IN EFFICIENCY

BY

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USAWC STRATEGY RESEARCH PROJECT

AIR POWER AND COUNTERINSURGENCY: A STRATEGIC STUDY IN EFFICIENCY

by

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ABSTRACT

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Air Power is a critical commodity that can contribute significantly to counterinsurgency warfare. This type of warfare requires a joint, multinational command and control approach. There are multiple examples of successful COIN air campaigns resulting in the effective and efficient application of this high commodity asset. Due to cultural bias, parochialism and lack of a prioritized air effort across the joint force, duplication of effort and inefficiency exist in today's air power support to the COIN fight. A complete relooking of air support in Iraq and Afghanistan is necessary and a comprehensive approach to all Army and Air Force aviation asset usage should be developed. Improvements could be made, and these would enhance the chances of success in current fights. Also, greater efficiency in the use of air power translates into a better effort in the support of the President's strategic goal of rapidly moving forces into Afghanistan and equipment out of Iraq. These improvements ought to be based on a reexamination of air power in the Iraq and Afghanistan theatres, and ought to aim for a comprehensive approach to all Army and Air Force air asset use.

Army plus air must be so knitted that the two together form one entity – if you do this, then the resultant military effort will be so great that nothing will be able to stand against it.

—Field Marshal Montgomery¹

Due to current demands on the force in the global war on terror and extended lines of communication, high commodity assets are in short supply. Maximizing air power is essential for success in the ongoing counterinsurgency effort. This asset is spread out across all services and applied daily across the spectrum of operations in a disjointed, service - focused manner. Historically, aviation contributes significantly to the counterinsurgency or COIN effort through five primary missions; liaison, surveillance and presence, strike in support of ground forces, troop transport and psychological operations.² Airpower enables coalition forces to operate more effectively and is a true force multiplier. But it must be synchronized across the services in order to efficiently apply this limited asset across the battle space. Lack of an overall air power COIN strategy, service culture, parochialism and a lack of understanding of the lessons of the past inhibit the United States Army and Air Force from maximizing efforts in the COIN environment. Furthermore, greater efficiency in the use of air power translates into a better effort in the support of the President's strategic goal of rapidly moving forces into Afghanistan and equipment out of Iraq. Through an examination of past counterinsurgencies, airpower applications, ongoing operations and potential organizational changes, the use of this crucial asset could be significantly improved and better integrated into a comprehensive airpower strategy for COIN. Such a strategy would reduce redundancy and improve overall support.

Aviation in COIN – The Historical Record

The U.S. Army and Marine Corps Counterinsurgency Field Manual No. 3-24 defines Insurgency as an organized movement aimed at the overthrow of the government through the use of subversion and armed conflict.³ This type of warfare has a long past and continues today in both Iraq and Afghanistan. Modern Counterinsurgency Warfare requires a joint, multinational command and control architecture for air and space.⁴ Five decades of COIN operations, since World War II, from Greece to El Salvador, show consistent operational lessons. Human interaction, controlling populations, protecting populations, deterring and lethally targeting enemy organizations are fundamental tenants of a counterinsurgency campaign. ⁵ The major reason behind the complexity is the requirement to conduct full spectrum operations. Offensive, defensive, and stability operations are all required in the COIN environment and, depending on the situation and mission, these three types of operations can be weighted or mixed.⁶ As the government addresses the root causes of an insurgency, economic, social and political problems normally present themselves. In addition to addressing root causes, the government must attack the insurgent organization. Troops frustrated at taking casualties cannot retaliate against entire communities accused of harboring insurgents. The insurgents are very aware of this dynamic and often attempt to provoke government forces into overreacting. Every reprisal, errant bomb or misdirected shot can potentially create more insurgents or increase support for the insurgents cause. Thus, the use of this asset must be judicious and efficient.

In 1911, the airplane made its combat debut in the conflict between Italy and Turkey for control of Libya. Several years later, airplanes would undertake a wide range of new roles during the First World War. The opening of this third dimension in warfare

allowed aircraft to extend the vision of commanders and enable the battlefield to be seen in a whole new way. Biguilo Douhet and Billy Mitchell were two early theorists who devised strategies in order to maximize this weapon's capabilities. They both advocated early on, the importance of air supremacy and the need for an autonomous air arm. Additionally, based on both men's experiences in World War I, they understood the importance of strategic bombing. They came to believe that strategic targets were much more important than tactical targets and this type of bombing was designed to cause complete destruction or permanent and irreparable damage to the enemy which would have a decisive effect. The early theorists of airpower were drawn to strategic bombing due to its lure of quick victory. They did not, therefore, focus equal attention on other elements of aviation in warfare. From the beginnings of air power, theorists embraced the almost magic attraction of strategic bombing, but World War II proved that strategic bombing was not a panacea, and that air ground integration was something that had to be learned.

After a long interwar struggle for independence, the U.S. Air Force became a separate service in 1947. Army, Navy and Marine Corps aviation finally settled into their direct support roles to their services. Despite the guerrilla insurgencies in the Philippines, Malaysia and French Indochina during the decade following World War II, Air Force planners focused on the nuclear threat emanating from the Soviet Union. Throughout the cold war era, the USAF focused on its strategic mission. After the use of the atomic bomb in Japan in World War II, the USAF continued to focus principally on strategic bombing; the ensuing standoff with the Soviet Union reinforced this notion.

Strategic bombing justified the existence of a separate Air Force, and it was thus powerful in organizational terms.

The contemporary doctrine of the USAF is complex and multilayered. But the USAF must make an ongoing effort to balance the need to legitimize its core competencies and distinctive capabilities with the realities of the needs of the coalition on the ground in a COIN environment. Unfortunately, COIN is not a quick form of warfare and history shows us that successful air power integration in COIN does not rest on a massive strategic bombing campaign but, rather a ground focused adaptive use of air power. Lessons from past COIN fights can illustrate useful and less useful methods of employing air assets.

The insurgency in Malaya lasted from 1948 to 1960. Britain's Royal Air force (RAF), developed an exceptionally effective COIN doctrine while participating in this fight. Lieutenant General Sir Harold Briggs commanded the effort initially and coordinated the political and military effort that eventually defeated the guerilla force in very complex terrain. Small unit tactics were critical to the ground effort. By extending the presence and protection of the government to remote, jungle areas, the military denied an operating environment for the Malayan Races Liberation Army, MRLA. Aviation provided critical support to this effort and proved invaluable in this endeavor. The Malay Peninsula stretches over 50,000 square miles in mainland Southeast Asia and much of the area is under triple canopy jungle. It suffers from poor road networks and weak communication infrastructure. Centralized coordination of intelligence under one official, integrated political and military effort and a unified approach by all services to engage in a counterinsurgency were the fundamental aspects to this success.

Aviation contributed in a wide range of operations including offensive air support, reconnaissance, crop spraying and support of psychological warfare. The RAF utilized a myriad of different aircraft through the emergency. Jets, cargo aircraft, prop driven small airplanes and helicopters all served. Interestingly, aircraft with good firepower and significant loiter time were preferred. Jets were less effective as speed was often a liability. Smaller airplanes allowed for the successful resupply of troops in remote locations, thus increasing the operational reach of the British. The key to the successful integration of air power in the Malayian emergency was most certainly the unified approach and total integration of air in support of ground forces counterinsurgency efforts. Interestingly, RAF officers did disagree with Army commanders dictating priorities but, in the end, the advantages of mobility and flexibility were appreciated as key to maintaining the initiative against a foe that held the advantage in its own complex and under-developed home terrain.

Colonel Phillip S. Meilinger, USAF, wrote in his <u>Ten Propositions – Emerging Airpower</u>, "Airpower Produces Physical and Psychological Shock by Dominating the Fourth Dimension - Time." Perhaps dominating a specific point in time can be decisive, but COIN does not always allow for this. Indeed, because guerrilla war is protracted war, it does not play to the traditional strengths of air power, denying it the ability to achieve decision quickly. When denied the opportunity to telescope time, air power can be ineffective. ¹⁷

Shortly before sustained combat in Vietnam, Air Force doctrine still held that the industrial web theory of strategic bombing applied to modern nations. Most airmen thought key strategic targets could be identified and hit in any nation.¹⁸ The

fundamental notion behind the 1965 strategic bombing campaign "Rolling Thunder" was to coerce the North Vietnamese and make them believe that they could not win the war. The belief that Ho Chi Minh might break under the strain of bombing may have been influenced by the recent Russian back down during the Cuban Missile Crises due to the perceived threat of the Air Force and nuclear prowess. In addition, the Air Force believed that bombing would deny the communist forces in the South direction and support. "Rolling Thunder" destroyed 65% of North Vietnam's oil storage capacity, 59% of its power plants, 55% of its major bridges, 9,821 vehicles and 1,966 railroad cars. But, ultimately, this failed to coerce the North and had very little impact on the war in South Vietnam. Unfortunately, the Viet Cong operating in South Vietnam did not present a ready target and their supply trains located under jungle canopy were not easily identified.

"Rolling Thunder" did not achieve the strategic success the Air Force hoped for.

Also, the USAF leadership did not fully acknowledge that they were fighting a different type of warfare, instead they tended to blame civilian restrictions and meddling as root causes for failure. During the Vietnam era, Air Force Doctrine downplayed or discounted the probability of a limited war, especially one in which the enemy rarely presented itself. This same doctrine claimed that victory through the air was possible regardless of the nature of war, or the chances of identifying and bombing the enemy's capability and will to fight. ²¹

The Vietnam War proved to be a ready example of the difficulties associated with the conduct of a counterinsurgency. The flawed strategy started at the highest levels of the US government and reached down to operational commanders in the field. Political concerns and the Just War notion of proportionality kept the Lyndon Johnson administration from waging a swift and heavy bombing campaign against North Vietnam.²² But, due to the nature of the war, it was never clear that such a swift bombing campaign would have brought the desired results, and the protracted effort was not effective. The fact that during the course of the Vietnam War the Air Force dropped over 6 million tons of bombs on North Vietnam, substantially more tonnage that the allied powers dropped in all of World War II, reveals the limitations of air power in COIN.²³ The enemy was able to adjust and to absorb the blows, even as those blows accumulated, eventually, into a massive onslaught.

No unified air effort existed, resulting in task organizations failing to maximize the joint effort. As they had in the Korean War, Navy and Air Force assets conducted separate air campaigns with no overarching air strategy. In Vietnam, Seventh Air Force in South Vietnam fought the air war in country, Thirteenth Air Force directed air operations in Thailand, and Strategic Air Command fought an entirely different campaign with B-52s.²⁴

In Vietnam, the Army preferred to operate in large troop formations, attempting to attack large enemy concentrations and ignoring past lessons of COIN that pointed to securing population centers and local engagements with the population. The Marines were close to utilizing a COIN approach as the defense of DaNang forced an area security, small unit, local approach. The Special Forces tended to operate in sparsely populated, remote areas and were also not integrated into a wider counterinsurgency effort. The Central Intelligence Agency, (CIA), the Agency for International Aid Development, (AID), the State Department, and many others were also not integrated

into a wider strategy in Vietnam.²⁵ The Air Force, Army, Navy and Marines all had different views of how to utilize air power; even within the Air Force, generals would not relinquish control of air assets to the Air Force commander in Vietnam. The absence of a cohesive civil military relationship in the United States, coupled with the diverse threat from both revolutionaries and partisans, facilitated a dysfunctional approach to the development of a comprehensive strategy.²⁶ Institutional cultures seemed to reinforce the tendency towards division, and this was further complicated by the fact the all services had to learn to fight a counterinsurgency war.

Helicopters and COIN

The Vietnam War forced the Army to relearn maneuver and proved the worth of helicopters integrating maneuver and firepower, forever changing the Army's approach to warfare. This new type of auxiliary aviation air power would present itself on the battlefields of Vietnam and give air theorists a clear way forward for improving the use of air power in a counterinsurgency. Due to the nature of the enemy in Vietnam and the insurgent's ability to operate in and among the people in urban and complex terrain, the helicopter emerged as the preeminent air weapon. The Army had procured its first observation helicopters in 1947. Although used sparingly, the Army's light, fixed wing airplanes used for reconnaissance, and helicopters utilized for medical evacuation, liaison, artillery spotting, and resupply were the norm through the Korean War. In 1962, the air mobile concept came into being with the UH-1 Huey and armed helicopter, the AH-1 Cobra. As the Vietnam War progressed, helicopters played an increasingly important role.²⁸

The Marines had long possessed their own air arm and had developed a helicopter capability during the Korean War. Marine Corps' planners suggested that

helicopters could be employed to exploit the vertical flank. By the early 1960's both Army and Marine aviation units were in Vietnam conducting air mobile, assault operations with South Vietnamese troops. This action helped develop doctrine and is considered the pioneering effort that set the terms for today's Aviation operations in a COIN environment, for both the Army and the Marines.²⁹

In Vietnam, several battles occurred that pointed to the usefulness of the helicopter and its potential in combination with USAF airpower. The Army's airmobile offensive into the Ia Drang Valley in November 1965, with the Air Cavalry Division's 434 helicopters, was a decisive battlefield victory. This battle not only showcased the Army's newfound mobility, enabling large infantry-centric organizations to go to the enemy when discovered, but it showed air power's devastating effect on the enemy when close air support is utilized. On 14 November 1965, eighteen dispatched B-52's dropped 344 tons of bombs on two North Vietnam regiments counterattacking the 1st Calvary Division, effectively crippling the enemy regiments.³⁰

The Air Force, Marines and Navy air assets proved decisive during the siege of the Marine outpost at Khe Sahn in January of 1968, where 59 tons of bombs and artillery were dropped on the two North Vietnamese Divisions engaging them. When the North Vietnamese massed and showed themselves, air power dominated.³¹

Issues with airspace coordination and lack of a coordinated air effort between the Army and Air Force were all too apparent during the Vietnam War, but there were instances of great success as well. Perhaps the two most important lessons learned in the Vietnam War were the value of auxiliary aviation and the critical need for intelligence to be able to identify a fleeting enemy. When the enemy was detected, overwhelming,

concentrated air power would decimate the target. For much of the Vietnam War, the Air Force hung on to the strategic bombing philosophy, preferring to use air assets in independent operations, like interdiction, that offered the prospect of large scale returns. This worked to the detriment of auxiliary missions like close air support that provided a limited amount of support to a single ground unit.³²

In Vietnam, Army aviation provided the force a wide variety of capabilities necessary in a COIN conflict. But while these lessons were captured in Army doctrine, the Army struggled initially in Iraq and Afghanistan due to new enemy threats (such as shoulder-fired surface-to-air-weapons), long lines of communication, complex terrain, and the fact that COIN had not been at the forefront of Army thinking for many years. Also, efficiencies in how to support such a wide-spread counterinsurgency had to be relearned. The Air Force was slower than the Army to recognize COIN trends and apply them to their operations in Iraq and Afghanistan. While some progress has surely been made, the Army and Air Force still struggle in adopting a comprehensive air support strategy utilizing both Air Force assets and Army auxiliary aviation. There are many causes for these differences but doctrine and culture continue to be dominant reasons for the lack of a unified air effort.

<u>Doctrinal Differences and the Air Force Culture of Centralized Control</u>

The culture of the United States Air Force revolves around technology; in an airman's view, airpower is a result of technology. This is in contrast to the United States Army which believes that the soldier is the foundation of its organizational and cultural approach to war. Air Force doctrine acknowledges the principle of host nation legitimacy in COIN but does not adequately describe or show how air power contributes to it.³³ Instead, air doctrine focuses on defeating the insurgent with little reference to

specific, historically proven COIN air roles. Also, training of the host nation air forces in order for them to fight their own war is rarely mentioned in doctrine and is undervalued.³⁴ The Airman believes that mastering technology and applying this force at tactical, operational and strategic levels across the spectrum of conflict separates the Air Force from other services. Preemption, which traces its roots all the way back to Douhet, is symptomatic of the offensive-minded Airman. According to Major General Charles Dunlap, the USAF's deputy Judge Advocate General, the words "learning and adapting" sound defensive to the Air Force.³⁵

Unfortunately, a counterinsurgency has very few targets that are central to the war effort; insurgents control the timing of engagements, and the ground forces are the primary agents interacting with the population. To be a success in a counterinsurgency, one must separate the insurgents from the population and give the population both security and government services. Obviously, there will be a need for some kinetic, precision strikes but the overwhelming support will be focused toward the ground force and theatre wide support in airlift, surveillance and reconnaissance.

The Army and Marine Corps Counterinsurgency Field Manual 3-24 offers a keen insight into the differences between the Army and Air Force's approach to COIN warfare. The Army and Marine Corps focus on lessons from the past in order to mold how strategies and a joint approach should be conducted. The Air Force believes that lessons of past COIN operations conducted in the context of inferior or old technology are of little value. Major General Dunlap felt that FM 3-24 inadequately displayed the potential contribution of air power. In a 2007 *Military Review* article titled, Understanding Airmen: a Primer for Soldiers, he spoke of air power's ability to replace

manpower with technology.³⁶ Although there may be truth to the premise that efficiencies in the air may result in less manpower committed, a successful COIN approach proven throughout history is a main effort on the ground, with air power serving in a supporting role.

The USAF produced Air Force Doctrine Document, AFDD, 2-3, Irregular Warfare, at about the same time the Army released FM 3-24. The document shows that there has been progress in Air Force COIN thinking. The forward, given by Air Force Chief of Staff General T. Michael Moseley, offers four baseline principles about COIN and the Air Force's contributions. Moseley's first point is that irregular warfare is sufficiently different from traditional conflict to warrant a separate USAF document. Second, COIN operations must be planned as a joint, multi-national and multi-agency campaign with proper strategy development toward the desired end state as the first requirement of all joint force components. Third, airpower can, if properly employed, produce asymmetric advantages than can be effectively leveraged by the joint force commanders in almost all aspects of irregular warfare. Lastly, airmen must not be shy about articulating and communicating potential air component contributions to the COIN effort.³⁷ AF DD 2-3 does admit that the center of gravity for combat operations will typically be some segment of the population. Conceptually, this too is in agreement with FM 3-24.

The two documents differ however in the perceived contribution of air power to the overall effort. The Army views air power as a high commodity asset that is critical for success in COIN based on past COIN experiences. The Air Force is comfortable with a focus on coercive targeting and creating a rapid, decisive impact; it does not

always appreciate historical lessons learned as the Army does. General Dunlap portrays this as an air minded approach utilizing innovation and adaptability, seeking to identify threats and deal with them before they are issues. The underlying foundation of this approach goes back to the centralized control approach culture strongly favored by the USAF. The strategic nature of targets would demand centralized control but in COIN, most targets are not strategic. Nevertheless, the USAF continues to use this method of granting access to assets. The result is often inefficiency and duplication of effort because ground units cannot get access to Air Force assets without utilizing a labor-intensive method for requesting support. AFDD 2-3 states that intelligence, surveillance and reconnaissance systems, SOF assets and other low-density, highdemand assets must be prioritized and centrally managed. The disagreement between air and land components is age-old and deep. Simply stated, it is a fight over who owns the air asset and controls the air asset at the operational and tactical level.³⁸ This cannot help but impact the fight at the strategic level too. Until this is agreed upon between the services, friction will always be present as each service attempts to assert itself as the controlling agency over the asset. Tragically, the soldier on the ground usually is the one who pays the price for lack of coordination or indecisiveness on the part of leaders.

Another example of how the USAF emphasis on centralized control creates problems can be found in the process for the clearing of joint assets to release ordnance in a COIN environment. Joint Publication 3-09.3, Close Air Support (CAS) Manual, spells out the procedures for controlling CAS. The two primary reasons why the Air Force strongly prefers centralized control over CAS revolve around fratricide and

effectiveness. The Air Force has deep concerns about fratricide, and painful memories of past fratricides reinforce this notion. They also believe that Air Force-trained controllers are more effective than a Joint Forward Observer, JFO, resulting in greater safety to Army personnel. The problem is that the Air Force wants Joint Terminal Attack Controllers, JTAC, and their airborne equivalents to be the primary controllers of CAS. Due to the large number of Army units operating in the COIN environment, the challenge for the Air Force is to get as many JTACs or Enlisted Attack Controllers, ETAC, as possible down to Army units in order to fully utilize CAS assets. This raises the debate of centralized control to manage a finite resource versus a more effective method of pushing more of these assets down to the user by training more Air Force and different service personnel in order to better control CAS. The USAF chooses to attack this problem by mixing centralized control and more technology to make their airmen more effective. But the superiority of this method is not always apparent to Army officers on the ground.

Evolution of Air Assets in COIN for Iraq and Afghanistan

It has taken time, but the Air Force realized efficiencies that have proven effective in the Afghanistan and Iraq campaigns. Just as the Army learned lessons throughout the first years in Operation Iraqi Freedom, the USAF also developed better tactics, techniques and procedures in support of COIN. Aligning potential sorties to ground force maneuver plans, support requests flowing through the theatre control air system, (TCAS), which finds the closest airplane to the ground contact and utilizing full mission video downlinks on aircraft fed to ground commanders all have significantly increased Air Force relevance.³⁹

As more ground forces enter Afghanistan however, the increased demand manifests itself with JTACs potentially handling multiple engagements simultaneously from Brigade Tactical Operations Centers, (TOCs), utilizing UAV feeds. Because the Taliban is increasingly attempting to put themselves among the people, the USAF needs to allow more targeting data to come from different sources. This would give personnel that are closer to the actual engagement, with a higher level of situational awareness, the ability to utilize fires from air assets. This increase in situational awareness would help to prevent civilian casualties. Another potential solution would be the development of a system that allowed ground elements to designate targets; Army personnel would then confirm that no friendly elements were in the target area and then aircrews would independently confirm the targets.

These systems are currently available in the armed forces but need to be networked and integrated for a TAC to utilize the multiple sensor inputs to expand the area a TAC could cover. This approach to expanding a ground TAC's situational awareness and procedural control would take a significant cultural shift on the part of the Air Force. Concerns about the strategic consequences of fratricide and civilian casualties remain the primary reasons why this cultural shift is so tough for the Air Force. The answer is standardized training and technological integration. To maximize efforts in this war, we must be efficient and effective. More training and more technological development of systems that allow integration of sensors and access from ground forces to air platforms are necessary. To couple this with a new culture of efficient joint integration of air versus centralized control by one service would make a difference in this COIN fight.

The Army produces Joint Fires Observers, JFO, at Ft. Sill, Oklahoma where Army personnel are taught to request, adjust and control surface-to-surface fires, providing targeting information in support of Type 2 and 3 CAS terminal attack controls. Unfortunately, the Air Force still requires the JFOs to communicate through a qualified and current JTAC/Forward Air Controller-Air, FAC(A), for the CAS asset to engage the target. The airborne FAC allows the airman to assist with the guidance of tactical air strikes while covering more territory than a surface observer. Additionally, complex terrain can limit a ground FACs ability to gain situational awareness.

There is no regulatory reason for JTACs to deny targeting data from Army aviators in helicopters. The Army aviator should be able to provide targeting information through a JTAC/FAC(A) to the CAS asset, especially when sophisticated lasers are being used to acquire range and location data. Also, the Army aviator normally has much more situational awareness than a FAC(A) or a JTAC who is on the ground.⁴⁴

A cultural change easing the insistence upon centralized control would benefit the Air Force and not cost any additional money for the Army or Air Force. As with other cultural legacies that affect performance in a COIN environment, this resistance to change can cost lives. The failures have ranged from the inability to employ weapons at the location of an aircraft shoot down, to the lengthy formal targeting process causing ground commanders to utilize inappropriate types and/or quantities of weapons to destroy targets. A JTAC located in a TOC utilizing a UAV feed cannot be more in synch with the operation than an Army helicopter on scene and in communications with the ground commander. If there is no UAV feed available, the JTAC will not allow the CAS asset to deliver its ordinance. Also, fratricide is a real consideration when a JTAC is

attempting to coordinate the delivery of ordinance from a TOC many miles from the scene and there are Army helicopters operating in the area.⁴⁵ This is another example of how the Air Force could change culturally to make itself more efficient on the COIN battlefield.

The current Rules of Engagement (ROE) in Afghanistan, recently ordered by General Stanley McChrystal, Commander of ISAF, have made the Air Force less inclined to take risk in this area. These rules were designed to ease ISAF/ Afghanistan tensions over collateral damage resulting from the use of air power in theatre. Strict procedures for weapons release in theatre and strategic consequences when collateral damage is incurred all encourage the Air Force to be slow in adapting its position on controlling CAS. The Air Force needs to be comfortable with the JFO role and the Army needs to communicate to the Air Force that this higher risk is acceptable in certain circumstances.

The flattening of command and control is something the Army embraced and its Brigade Combat Team concept has proven successful. Less control does not equate to being less effective and the Air Force needs to stay consistent with the Army by flattening its command and control reach, allowing more decisions to be made at lower levels. This cultural change would have far-reaching and immediate impacts on how the Air Force conducts operations, especially in COIN.

One example of how the Army adapted to COIN was the evolution of helicopter operations in Iraq and Afghanistan. In 2004, the Army canceled the Comanche Armed Reconnaissance program with a savings of \$39 billion dollars. The money was then turned into a restructuring and transformation of all rotary wing aircraft. The technically

advanced helicopter was cancelled because it was deemed inconsistent with anticipated future 21st century operating environments.46 The Army had learned hard lessons in past conflicts and knew that more diverse mission aircraft, task organized down to the ground commander, would be of more value than the Comanche. The end result was the creation of a combat aviation brigade that possessed heavy lift CH47s, an air assault capability with UH60 Blackhawks, as well as command and control aircraft and medical evacuation assets and attack helicopter battalions that had both strike and reconnaissance capability. All support mechanisms were also built into the organization. Lastly, in theatre, most combat aviation brigades handle all launching and recovering of Unmanned Aerial Vehicles streamlining airspace management turning control for employment over to user Infantry Brigades and then recovering the UAV. This rebuilding of Aviation Brigades put the entire array of Army rotary wing aviation at the ground commander's disposal. This design has proven very efficient in Iraq and Afghanistan and is a major reason why Army Aviation is so relevant on today's COIN battlefield. Even with these accomplishments, the Army could do a better job of comprehensively looking at air power utilizing a joint approach with the Air Force to maximize all air assets in theatre.

The Current Fight: Observations, Problems and Potential Solutions

In the recently announced Afghanistan strategy, rapid movement of personnel into Afghanistan and equipment out of Iraq is given priority. Air power will play a key role in this and must be synchronized across the joint force. In a January 2010 speech at the Army War College, LTG Kathleen M. Gainey, J4, highlighted some of the issues associated with a quick buildup of forces in Afghanistan. She spoke of ramp space limitations and separate Army and Air Force air traffic control procedures contributing to

inefficiency, resulting in longer times on the ground. Separately-managed airfields in theatre draw resources from the Army and Air Force where efficiencies could be gained. An improved spoke and wheel concept of delivering supplies, augmented by an overall air strategy maximizing all Army helicopters in concert with Air Force lift aircraft, would also make a difference. Also, properly managing arrival times across the joint force, utilizing a queing system to ensure availability of ground handling equipment and follow-on transportation would enable more aircraft to land, depart and minimize wasted time on the ground. These issues have strategic impacts as the ability to move forces into theatre is a primary limitation to enacting the current Afghanistan strategy. Taken together, these improvements would greatly enhance the ability of the joint force to accomplish the mission in theatre. Currently, joint assessments are ongoing to address some of these logistical issues but an overall air strategy would certainly further this effort resulting in a greater ability to implement the strategic objective of rapid movement into theatre.⁴⁷

Most planning during COIN is done at lower echelons. Further, planning and execution timelines are often short and fluid. This requires informal-formal coordination and integration for safety and efficiency.⁴⁸ But, these demands frequently run counter to the Air Force's culture of centralized control. The Air Force speaks of efficiency but tight, centralized control of assets in a demanding COIN environment can contribute to a reputation of inflexibility on the part of the Air Force in Iraq and Afghanistan.

Currently, in Iraq and Afghanistan, the USAF is attempting to mold itself into a relevant organization in support of the ongoing counterinsurgencies. But, the interservice rivalries between the Army and Air Force continue to inhibit efficient application

of airpower. Unfortunately, the consequences of failure can manifest themselves on the battlefield.

The 13 July 2008 battle of Wanat, in Nurestan's Wasgal Valley in Afghanistan stands as a testament to the tough fighting conditions soldiers face in a counterinsurgency. Nine American soldiers died and the paratroopers of 2d Platoon, Chosen Company, 2-503d Airborne were almost overrun by a 200 man strong Taliban force. There is no single reason for this tragedy as the fighting in Afghanistan is complicated and inherently dangerous. One thing is for sure, a more robust and balanced approach to air support would have made a difference. Army Aviation has a significant presence in Iraq and, obviously, this plays a role in how many combat aviation brigades can be dedicated to Afghanistan. Helicopters are essential in a counterinsurgency, a fact that is only intensified by the rocky and mountainous terrain in Afghanistan. The remoteness of this outpost and lack of air assets certainly played a role in the Wanat battle. Two days into 2d platoon's mission, a predator surveillance drone, one of only two in Afghanistan, was shifted to another location due to a mission change. Also, the first attack helicopter did not arrive until an hour into the firefight.⁴⁹ Lastly, if more resupply aircraft had been able to fly in support of this remote outpost, more life support and defensive material could have been delivered. Currently, availability of UAVs does not appear to be a significant issue; nevertheless, the lessons of this tragedy as they apply to efficiency, effectiveness and availability of air assets in Afghanistan, are definitely worth noting.

On October 8, 2009, a similar event occurred at Camp Keating in another rugged combat outpost in Afghanistan. Tragically, eight soldiers also died in this attack but Air

Force strike aircraft and Army attack helicopters were much more responsive.⁵⁰ This prompt response surely prevented more soldiers from losing their lives that day. A complete relooking of air support in Iraq and Afghanistan is necessary and a comprehensive approach to all Army and Air Force aviation asset usage should be developed. The Air Force and Army need to apply these tragic lessons learned and find ways to better give the right type of support to these soldiers located on isolated outposts. In Afghanistan, as coalition forces push into more remote regions, the demand for helicopters that can land at remote outposts continues to go up.

This lack of transport helicopters continues to hamper efforts in Afghanistan. Not only are there shortages in the conventional counterinsurgency efforts but also in the unconventional aspect of the coalition effort; indeed, these are even more acute.

Special Operations Forces, (SOF), focused on hunting and killing Taliban and Al Quada, receive a more significant portion of Special Operating Forces aviation. The Green Berets, who are working a vital but unglamorous counterinsurgency operation in the tribal regions on the Afghanistan Pakistan border, focus their efforts on recruiting and training local antiterrorist militias. Unfortunately, this group routinely cannot get air support to transport them to the remote locations necessary for their missions. Indeed, the helicopter shortage is so acute that 80% of their requests are rejected. This forces the critical SOF element to attempt to utilize conventional air assets, which are already strained from supporting the myriad of requirements levied on them by the conventional forces in theatre. Colonel Tim Nye, U.S. Special Operations command spokesman said recently, "The fact is both personnel and equipment are finite. Air lift is a top priority,

and one of many concerns to which United States Special Operations Command devotes considerable attention."⁵²

Not enough COIN-relevant aircraft are present in theatres where American forces are engaged. A real need for lift rotary aircraft continues to present itself, not only to resupply forces and enable SOF personnel greater access to tribal regions, but also to give the commanders maneuverability. Air Assault operations are critical to achieving operational surprise and taking the fight to the enemy on the coalition's terms. This tactic deprives the insurgents the ability to dictate contact or to take the initiative. The Air Force should identify those type assets that are in most high demand in a COIN environment and task organize its squadrons accordingly.

C-130 lift remains a friction point between the services due to the Air Force's approach to an intra-theatre air support concept prioritized by the Air Force which restricts landing to a limited number of designated airfields. Couple this with highly centralized procedures for requesting support and the result is a support arm that deals in the routine as opposed to critical needs. The balance to achieve is one between too much centralization and too little centralization. The former leads to lack of responsiveness and the latter inhibits focusing assets at the right place at the right time on the battlefield. During much of the war in Vietnam, the Army had its own tactical fixed wing aircraft, the C-7 Caribou. This light fixed wing aircraft flew to remote fire bases resupplying widely distributed American forces. This short field capable aircraft filled a critical need for the Army and made Air Force assets more relevant as loads too heavy for large helicopters to carry could be flown directly to the Army unit at a remote location.

Currently, in Iraq and Afghanistan, USAF centralized control makes the Army commander commit Army helicopters to long flight legs to resupply remote forward operating bases due to the inability of C-130s to access these locations due to procedural restrictions. The intra-theatre air planner only services certain types of airfields in certain locations. This does not always line up with the needs of the ground commander, resulting in supplies now having to be trucked or flown by helicopter to remote locations. This is an example of centralized control not conforming to a COIN environment and is another reason for USAF COIN focused aircraft to be organized into squadrons and deployed as Army units are deployed, for a full year at a time.

A solution is the integration of a lighter fixed wing, assault lifter aircraft that can access the smaller FOB, and a lifting of USAF restrictions allowing these aircraft to fly into unimproved landing strips. Another potential solution would be to allow the Army to develop and procure its own fixed wing aircraft that would increase capability beyond the current small fixed wing aircraft the Army flies. Currently, Army Aviation is the responsive air arm of the joint force in Iraq and Afghanistan due in part to Army and Air Force inability to approach the utilization of air in a truly joint fashion. Army assets are more plentiful and work in a direct support role to the ground commander, conduct inflight mission changes, and are able to deliver precision fires without enlisted tactical air controllers or forward air controllers. All of these advantages make ground commanders more prone to use Army Aviation, eroding the Air Force's relevancy on the COIN battlefield. Wray Johnson theorizes that the classical air power paradigm is at odds with counterinsurgency and an indirect application of air power often proves the most important contribution. He says that speed, high technology and centralized

control are not necessarily characteristics of a successful counterinsurgency air force. Slower, smaller airplanes that interact directly with ground forces and with human intelligence sources are much more advantageous. His description aligns with capability provided by helicopters, and it is generally consistent with the way the Army operates in a COIN environment. An aviation organization that focuses on the ground commander's needs, in tune with the complexities of a COIN environment, is much more relevant in COIN. Another problem hindering aviation in existing combat theatres has been the slow creation of indigenous air forces.

Creating indigenous airpower capability in both Iraq and Afghanistan has gone painfully slowly, and this has hurt ISAF strategic aims in the theatre. Standing up an Afghan Air Corps is definitely not an easy thing to do in light of literacy, funding, and equipping issues. But the Air Force itself has been slow to enact this program. Iraq also has had a slow start to creating its Air Force. Air Forces are not created overnight but the US must acknowledge that making them a priority and focusing assets in support of an overall strategy is what is required. The addition of COIN-focused air assets belonging to and operated by the host nation would greatly boost effectiveness in the field. Host nation air assets would assist with the demand for aircraft and would, potentially, help minimize the propaganda value derived by insurgents from air strikes that cause collateral damage and/or civilian casualties.⁵⁸ Even though the development of a host nation air force had a very slow start, there is some work ongoing but this effort needs to have more resources applied to it in order to better achieve mission success in both Iraq and Afghanistan. Lastly, these efforts need to be integrated into

Air Force doctrine. This integration would raise the priority of such training, and would give structural guidance to the mission.

The best way for the US Air Force to expand the ability to train indigenous Air Forces would be the creation of a wing-sized organization dedicated to aviation advising. The focus of this organization would be to help fledgling air forces learn and become proficient in the conduct of counterinsurgency operations. This would allow the Air Force to get beyond the current scope of its commitment which is flying, maintenance, communications, force protection and air base level operations. The additional focus would allow for the partnering and engaging in advising air staffs and ministry of defense level strategies in the integration of airpower into the COIN fight. These squadrons could be regionally affiliated, allowing for the development of expertise and for the communication of local lessons back to the general air force. Again, a full year deployment would be necessary as the current, temporary duty method of deployment for advisors is not effective. Finally, this new counterinsurgency career path needs to be acknowledged by the Air Force leadership and rewarded through promotion. Counterinsurgency expertise has not been a career path for USAF officers and has long been recognized as a dead end. The Air Force needs to develop this wing level capability to better assist foreign assessment of air capability, achieve higher level advising, embedded advising, and concept development. This capability will give an expertise to the Air Force that can be leveraged against a significant need in Iraq and Afghanistan. It would also enable the United States military to leverage all assets and would make the Air Force more relevant on today's COIN battlefields.⁵⁹

A current, successful example of a counterinsurgency air force developed by the USAF is the Colombian Air Force. The primary missions this force performs are liaison, strike, surveillance, troop transport and psychological operations. Additionally, the force has a special operations air capability. The Colombians split their country into six regional commands with six air detachments supporting each region. These COIN focused squadrons are able to perform all type mission sets associated with a counterinsurgency. The Columbians have light airplanes for liaison and reconnaissance, surplus American UH-1 helicopters, and MI-17 transport helicopters. They also have a strike capability with Israeli made KFIR jet fighters equipped to employ precision guided missiles for use against high value targets. This effective command and control structure, US military aid and training, and a task organized approach to fielding its air forces have produced dynamic results. Kidnappings have been reduced by over 50 percent. The FARC rebels' capability has been reduced by 40 percent since 2000, murder rates and instability in major cities have dropped, and casualties among the Columbian military are way down. 60 This focused approach stands as a testament to the progress that can be made if air forces are tailored for the type fight the host country faces. If Afghanistan and Iraq can assemble air forces that are tailored for a COIN environment, similar results potentially could be achieved. Of course, one must be careful in trying to draw exact parallels between this success story and the current challenges in Afghanistan and Iraq since both of these countries are certainly different from Columbia. Nonetheless, the USAF should evaluate its past successes and look for ways to integrate these lessons into the current fight.

Cultural Change

Cultural change requires strategic vision and leadership. An honest assessment of the external environment is necessary. Using the Model of Organizational Interpretation Modes, the Air Force seems to be characterized as a conditioned viewing organization, relying on established data collection methods. 61 An example of this is the tendency of the institution to place heavy emphasis on referencing number of bombs dropped or sorties flown in a counterinsurgency as a measure of success. Obviously, these statistics do not have much meaning in a situation where the center of gravity is the population and success is contingent on human interaction. The Air Force needs to identify existing trends and emerging developments and from this, they will see unfolding trends and future possibilities. 62 The measures of effectiveness are not simply hours or sorties flown but real progress on the ground, and air powers' contribution to this end. The key to becoming relevant and effecting real cultural change is to understand what ground commanders need in a COIN environment, and to apply this understanding to actions in the air. Today, ground patrols do not leave their forward operating base if Army aviation is not flying. Logistical resupply to the small combat outposts intermingled with the population is a critical contribution that enables the ground forces to perform their primary COIN mission of interacting with the people. Attack helicopter army aviation is highly responsive and lethal. Medical evacuation helicopters are a critical asset that allow ground commanders to do their mission and know that if their soldiers are injured, they can be transported quickly and efficiently in minutes (versus hours) from the point of injury.

The Army could work with the Air Force in articulating the needs and requirements for an assault lifter aircraft and potentially integrating Air Force personnel

into Army aviation formations, truly maximizing all assets. The Army could also take a role in the training of indigenous air force helicopter forces with the Air Force, incorporating the Army helicopter expertise into Air Force training squadrons.

Additionally, the Army could work with the Air Force and develop new joint doctrine and technologies enhancing ground troops' access to close air support. The USAF could also attempt to flatten its command and control structure, giving more direct control to subordinate or joint organizations. Most importantly, the Army and Air Force should work together to integrate all these issues into a comprehensive approach to maximizing all air assets in a COIN environment.

Cultural change also requires new behavior that leads to new attitudes and beliefs, and eventually to new values. This change can take years in the case of large organizations. The key is for the organization to be in tune with the external environment and to recognize that change is necessary, despite institutional preferences. Embedding mechanisms that would necessitate real change in the Army and Air Force should be implemented by the top leadership. While General Dunlap's critique of the Army and Marine Corps Counterinsurgency Field Manual does agree that in COIN the center of gravity is the people, he still believes in air powers' centralized control methods. In general, his concept of key missions for air power is not well aligned with the requirements of a COIN environment. A focus on COIN doctrine and decentralized command and control, especially planning and execution in support of the ground commander, would make a difference. The allocation of resources should reflect this reprioritization as well. Additionally, if the Chiefs of Staff of the Army and Air Force consistently spoke to general officers about focusing energies on synchronizing

the use of air power to facilitate COIN, the effect on how the joint force approached this fight would be significant.⁶⁴ Leading general officers are in a position to articulate and reinforce priorities, especially where inter-service cooperation is required. The results of these embedding mechanisms need to be captured and integrated into Army and Air Force Doctrine.

A reinforcing mechanism that would work well in coordination with the above suggestions would be the design of USAF COIN-focused squadrons and the ability to integrate Army and Air Force personnel into each other's formations when needed. These organizations would have a mix of transport, reconnaissance and strike assets that would reduce the demand for coordination prior to the utilization of the air asset. This new approach would require new organizational structures and doctrine but would greatly assist the Air Force and Army in their attempt to maximize contributions and capabilities. A cultural change of this magnitude would certainly require a significant effort in order to enable the process of organizational change.

In April 2009, General Norton A. Schwartz, Chief of Staff, USAF, spoke to a Brookings Institute forum in Washington D.C. and indicated that the Air Force was looking into creating a COIN squadron. He spoke of scaling this capability up in order to meet the demands of the current fight. General Schwartz also said, "Our ongoing challenge includes discovering how best to inculcate these (COIN) lessons institutionally in your Air Force, so we don't have to relearn these lessons with each succeeding generation." And he added, "Your Air Force is dedicated to establishing an appropriate institutional architecture, perhaps a wing, at least, culture and career paths to facilitate a sharp edge in irregular warfare that improves as time goes on." This is a

significant shift for the Air Force and one can only hope that old cultural predispositions will not prevent the Air Force leadership from adapting and learning from lessons in Iraq and Afghanistan.

USAF and Army combat capabilities for COIN are substantial, but significant shortfalls do exist. Problems associated with collateral damage in an urban environment can have detrimental strategic consequences and certain sensors flying at medium altitudes continue to have difficulty seeing targets in urban and complex environments.⁶⁶ Also, a more substantial approach to aviation advising is necessary in order to enable indigenous air forces to contribute more effectively to their own nation's war. Additionally, the Air Force needs to flatten its command and control structure as the Army did in the face of a COIN fight. Lastly, the Army and USAF need to focus on a more integrated, joint approach, making access to air assets more efficient and easier. This cultural shift also should also be applied to COIN with the creation of a USAF winglevel command that specializes in this type of warfare and transmits this expertise back to the Air Force and Army. These changes will certainly make the USAF more effective on today's COIN battlefield, and they will help the Army tailor its air assets for maximum efficiency. The Army and Air Force leadership would need to strive to keep people informed throughout this process and would need to consistently measure achievements in order to maintain momentum during this change. Finally, communication between the Army and Air Force would be absolutely necessary during this doctrinal shift and COIN-focused implementation. More importantly, the timing of the communication is essential to achieve maximum results during this transitional shift.67

The Army developed a COIN strategy that has proven successful but still lacks a comprehensive air strategy in support of its ground operations--a strategy that would integrate its own air assets with the USAF's assets. There is duplication of effort in some critical areas and if this issue could be addressed, this would better contribute to the overall success of the COIN in Iraq and Afghanistan. In a recent speech, General Norton Schwartz, USAF, drew on history to highlight the effectiveness of Air Power in a counterinsurgency. He focused on air gathered intelligence, and rapidly maneuvered elite forces by air into insurgent held territory.⁶⁸

Conclusion

The needed change in order to facilitate a more comprehensive approach to COIN by the Army and Air Force is going to require strategic leadership. Leaders must implement embedding and reinforcing mechanisms, and they must conduct a comprehensive historical review of past COIN contributions by air power. The USAF and Army must embrace the necessary change because failure to do so will result in services that are not contributing effectively or maximizing all assets in a tough COIN fight. After all, the Air Force is without peer at performing its core competencies and distinctive capabilities. Present day, the Army is clearly one of the best (if not the best) land forces ever to take the field of battle. At the heart of these tremendous services are the committed and talented soldiers and airmen operating with cutting edge technology. Air supremacy is something that the United States armed forces have come to expect and take for granted. The United States Army could not do what it does without the Air Force, but a counterinsurgency demands more, including the stretching and adapting of the services' core roles. For the United States to prevail with two COIN fights ongoing, there can be no waste, inefficiency or inter-service rivalry.

With any change there is risk, especially during war. A joint training command should oversee the evolution of service roles in order to prevent a service from being stripped of crucial capabilities even as it transforms. The services could object to this evolution since service culture and parochialism generally inhibit the blending of capabilities. Services might see it as an infringement on their core competencies, as well as their funding. The solution to this potential resistance is for service leaders to encourage a joint approach and to make clear that with the newly-released presidential Afghanistan strategy, resources are not infinite.

We must work together to be as effective and efficient as possible. Tough decisions will have to be made, but the services can and must adapt to this form of warfare, implementing strategies that make all services as relevant and efficient as possible. If all services focus on mission accomplishment with the most effective and efficient methods, this transformation will have significant impact, producing a more coherent and synchronized approach to air power in the ongoing counterinsurgencies. Change is difficult but with the correct approach and strategic leadership, all services can flourish and can work as effectively and efficiently as possible to help defeat the enemies of the United States.

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